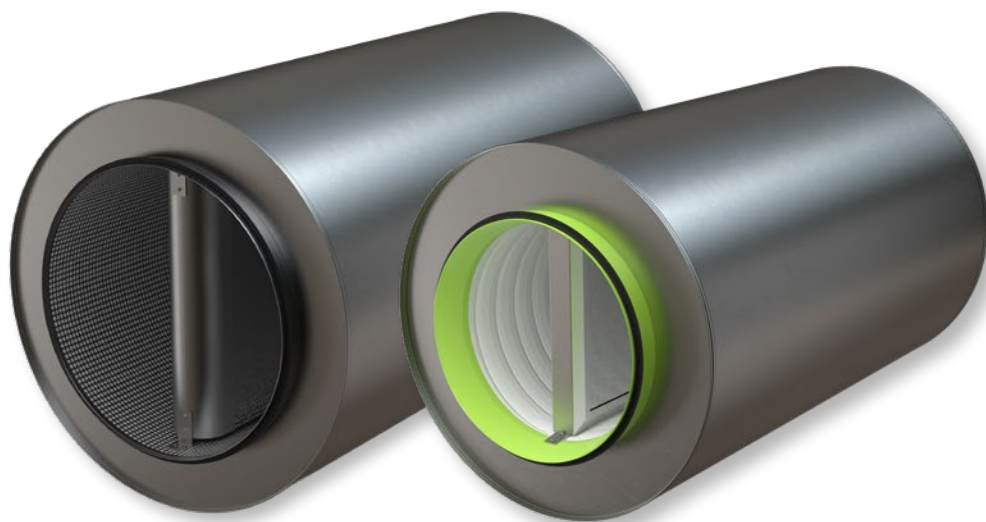


SORDO-B

Sound attenuator with centre baffle for circular ducts



QUICK FACTS

- Very good sound attenuation
- 100 mm mineral wool
- Low pressure drop
- Built for low CO₂ footprint
- Ø 315–400 with air tightness class D
- Ø 500–800 with air tightness class C
- Fire-resistance corresponding to class EI30 to EI120*
* See the table for requisite safety distance*



Technical description

General features

SORDO-B is a circular sound attenuator for circular connection spigots with 100 mm insulation.

In order to also accomplish improved sound attenuation data, the sound attenuator is fitted with a centre baffle.

Version

SORDO-B is an industrially fabricated product designed for excellent sound attenuation.

Dimensions 315-400 satisfy air tightness class D

Dimensions 500-800 satisfy air tightness class C

SORDO-B is insulated in order to correspond to fire-resistance classes EI30/E120, EI60/E120 and EI120/E120 on condition that the safety distance is complied with.

In buildings in which the safe distance from a combustible material and/or persons in an evacuation route is not complied with, SORDO-B then corresponds to fire-resistance Class EI60/E120.

Materials and surface treatment

SORDO-B dim. 315 to 400

- Made from recycled galvanised steel sheet for environmental class C3 (equivalent to M2 for AMA VVS2016)
- Sound attenuating materials: 100 mm thick mineral wool
- Fibre migration-secured thanks to our solution with self-supporting surface layer, approved with regard to cleaning, fibre migration, ageing resistance, emissions, etc.
- The connection spigots are fitted with rubber seals

SORDO-B dim. 500 to 800

- Made of galvanised sheet steel to environmental class C3 (equivalent to M2 as per VVS-AMA 98).
- Sound attenuating materials: 100 mm thick long-fibred compressed mineral wool lined with EUROLON. The sound attenuating material is also covered with perforated sheet steel outside the EUROLON layer.
- The connection spigots are fitted with rubber seals.



Figure 1. SORDO-B

Environmentally friendly alternative RE:3

SORDO-B (Ø315 to Ø400) is available with an environmentally friendly alternative called RRP, which stands for "recycled and renewably produced". The proportion of recycled steel in the steel amounts to at least 75 per cent. In addition, the manufacturing process uses electric arc furnaces that run on 100 per cent renewable energy. Choosing this more environmentally friendly option reduces the CO2 footprint by approximately 34% compared to the SORDO-B standard option.

Installation and maintenance

See separate installation instructions.

Environment

Building Materials Declaration and other environment-related documentation are available on our website.

Sizing

Sound attenuation

Sound attenuation is specified to ISO 7235, i.e. static integral attenuation for duct products.

Table 1.

Size	Length (mm)	Ø d (mm)	Ø D (mm)	Static integral attenuation, dB to ISO 7235								Weight kg	Safety distance in mm	
				63	125	250	500	1 K	2 K	4 K	8 K		EI60	EI120
315	500	314	482	4	8	10	17	24	28	19	11	13.1	-	50
	800	314	482	4	9	13	22	31	35	21	13	19.3	-	50
	1100	314	482	5	10	15	27	39	42	23	15	25.6	-	50
400	500	399	558	4	8	9	17	24	28	18	12	16.1	-	50
	800	399	558	4	8	11	21	29	31	19	12	23.5	-	50
	1100	399	558	5	9	13	25	34	34	20	12	31	-	50
500	900	499	700	3	5	10	20	29	24	18	17	50.6	-	200
	1200	499	700	3	7	13	25	35	30	21	19	63.2	-	200
630	900	629	830	3	4	8	14	19	19	13	12	80.7	-	200
	1200	629	830	4	6	12	17	21	24	17	16	94.9	-	200
800	900	799	1000	1	2	5	11	12	14	8	9	88.8	-	200
	1200	799	1000	1	3	7	13	14	18	11	10	101.5	-	200

Pressure drop

The pressure drop that SORDO-B duct-to-duct installation generates is specified in Diagram 1.

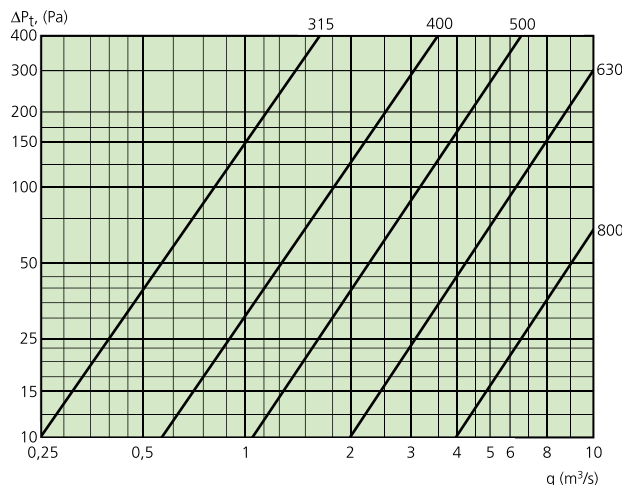
The specified data is based on a uniform air stream in and out of the product. Any dampers, duct bends or other products in the ducting near the sound attenuator will increase its pressure drop and level of flow-generated sound, and will affect its sound attenuating properties.

Software

You can find the sizing software easily on www.swegon.com

Swegon plugin for MagiCAD for AutoCAD and Revit means that you can choose a duct section from the drawings and automatically search for suitable sound attenuator options for the duct based on the duct form, dimensions, air flow and MagiCAD sound data.

Diagram 1. Pressure drop – Air flow



Dimensions

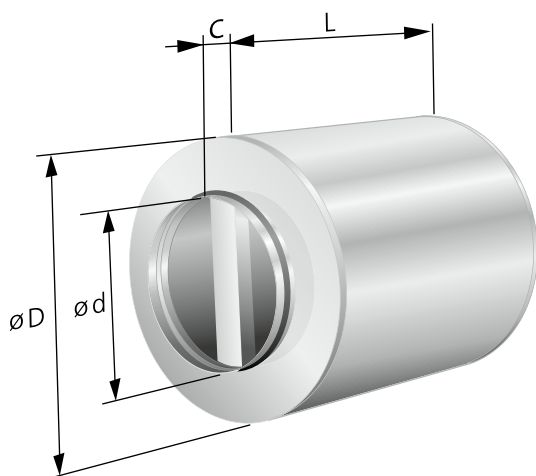


Figure 2. Dimension sketch

Table 2. Dimensions

Size mm	Ø d mm	Ø D mm	C mm	Length mm		
315	314	482	45	500	800	1100
400	399	558	60	500	800	1100
500	499	700	60		900	1200
630	629	830	60		900	1200
800	799	1000	60		900	1200

Specification

Product

Circular sound attenuators

SORDO B aaa- bbbb

Connection dimensions:

315, 400, 500, 630, 800

Length

(dim. 315+400)

500, 800, 1100

(dim. 500+630+800)

900, 1200

Specification text

Example of a specification text as per VVS AMA 12.

QKB.1 Straight sound attenuator with circular connection spigots

Example 1

Swegon type SORDO-B round sound attenuators for connection to circular ducts, with the following functions:

- Equipped with acoustic centre baffle
- 100 mm thick rock wool
- Excellent sound attenuation
- Low pressure drop
- (Ø 315-400) Manufactured with RRP galvanised sheet steel corresponding to environmental class C3 (equivalent to M2 as per AMA VVS2016) with a low CO2 footprint.
- Fire-resistance class EI30 to EI60 without safety distance
- Fire-resistance class EI120 with safety distance
Ø 315-400: safety distance 50 mm
Ø 500-800: safety distance 200 mm

Designation: SORDO-B 400-1100 xx pcs